**/\*20. Wap that search a given element in a set of N numbers using binary search \*/**

using namespace std;

#include<iostream>

int main()

{

int a[20],n,i,item,low,high,mid,found;

cout<<"Enter the size of array:-> " ;

cin>>n;

cout<<" Enter array:-> ";

for(i=0;i<n;i++)

cin>>a[i];

cout<<"\n Enter the element to be searched:-> ";

cin>>item;

low=0;

high=n-1;

mid=(low+high)/2;

while(low<=high && a[mid]!=item )

{

mid=(low+high)/2;

if(a[mid]>item)

high=mid-1;

else

low=mid+1;

}

if(a[mid]==item)

{

cout<<"\n successful search" ;

cout<<"\n Element is found at the position : ";

found=mid+1;

cout<<""<<found<<"\n";

}

else

{

cout<<"oops! Element Not found ";

}

system("pause");

return 0;

}

Output :-

